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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,245	10/19/2005	Harri Miettinen	3502-1069	2968
466	7590	12/30/2008		
YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER VAKILI, ZOHREH	
			ART UNIT 1614	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,245	<b>Applicant(s)</b> MIETTINEN ET AL.	
	<b>Examiner</b> ZOHREH VAKILI	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

#### **Claims 1-16 are presented for examination.**

Applicant's response to the restriction requirement filed on November 17, 2008 is acknowledged. Accordingly, Applicants elect Group I, claims 1-6 and 13-16 drawn to an animal growth promoting composition with traverse. Applicant asserts that Group I and Group II should be rejoined and examined on their merits. Claims 1-16 are not in condition for allowance and, therefore, the claims of Group I and II will not be rejoined. Applicant argues that the subject matter of the alleged grouped inventions are overlapping. Examiner does not agree because Group I is directed to a composition and Group II is directed to the method of preparing the composition. Group I and Group II are directed toward different objectives. Therefore, the restriction requirement between the groups I and II is still deemed proper and is made final. Claims 7-12 are withdrawn from consideration as being directed to non-elected subject matter. Claims 1-6 and 13-16 read on the elected invention and are herein examined on the merits.

#### ***Claim Rejections - 35 USC § 112***

Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Since the claims do not set forth any steps involved in the method/process, they are unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active,

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positive steps delimiting how this use is actually practiced. Moreover, it is unclear whether Applicant is claiming: (1) a composition; or (2) a method of preparing the composition.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-16 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejection(s)—35 USC 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-6 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schasteen et al. (US Pub. No. 20040175434 A1), in view of Raczek (US patent No. 6787166 B2), and further in view of Bland (US Pub. No. 20020009527 A1).

Schasteen et al. teach as an animal feed e.g. dairy cows, lactating dairy cows, dairy calves, beef cattle, sheep, goats, fish, crustaceans, swine, horses, chickens, turkeys, hatchlings, dog or cat, for inhibiting and killing microbes e.g. bacterium or mold in water or dry and/or liquid food (e.g. human food, livestock food, pet food, aquaculture food, meat or bone meal) containing corn and soya having a moisture content of 0 - 17 (preferably 0.01, especially 10) wt.% and for enhancing the palatability of animal food e.g. canine, feline or aquaculture (all claimed). Preferred Components: (a) Is derived from organic acid having at least one carboxyl and has pKa of less than 5.5. (a) Is formic acid, acetic acid, propionic acid, butyric acid, benzoic acid, lactic acid, malic acid, tartaric acid, mandelic acid, citric acid, fumaric acid, sorbic acid, boric acid,

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succinic acid, adipic acid, glycolic acid and/or glutaric acid (preferably formic acid, propionic acid, butyric acid, lactic acid, citric acid or fumaric acid). (b) Is mineral acid (preferably phosphoric acid, sulfuric acid, phosphorus acid, hydrochloric acid, hydrobromic acid or nitric acid, especially phosphoric acid). The combined concentration of (I) and organic acid is 0.1-50 (preferably 0.8 - 30, especially 1 - 25, particularly 1 - 10) g/kg. For enhancing the palatability of canine and feline food, 0.10 and 0.25 wt.% of (I) is used respectively. Preferred Composition: The composition comprises (wt.%): either 2-hydroxy-4-(methylthio)butanoic acid (Ia) (5 - 20, preferably 10), formic acid (65 - 85, preferably 75), propionic acid (1 - 15, preferably 5), and phosphoric acid (5 - 20, preferably 10); (Ia) (20 - 40, preferably 30), formic acid (45 - 65, preferably 55), propionic acid (1 - 20, preferably 10), formic acid (20 - 40, preferably 30), lactic acid (8 - 28, preferably 18), and phosphoric acid (10 - 30, preferably 20); (Ia) (10 - 30, preferably 20), butyric acid (2 - 22, preferably 12), propionic acid (20 - 40, preferably 30), formic acid (65 - 85, preferably 75), propionic acid (1 - 15, preferably 5), and phosphoric acid (1 - 15, preferably 5); or (Ia) (20 - 40, preferably 30), formic acid (40 - 60, preferably 50), and propionic acid (10 - 30, preferably 20). The content of (Ia) is 5 - 50 (preferably 5, 25 or 45) wt.% of the sum of (Ia) and acidulant. Preferred Method: The combination mixed with the food, which is heat-treated, is applied to a pre-mixed or pre-pelleted feed and is uniformly dispersed throughout the food.

Raczek teaches the invention relates to a storage-stable preparation that comprises sorbic acid and other acids and can be used alone in feeds or in a mixture with other feed additives in farm animal husbandry. Previously, feed experiments have

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been carried out, predominantly with piglets, which verified that various organic acids, such as citric acid, fumaric acid or formic acid are able to affect animal growth in a positive manner if they are admixed to the piglet feed in an optimum dose. Very recently, it has also been shown that sorbic acid at high concentrations (1.8-2.4% sorbic acid, based on the feed) has a high nutritional activity for growing piglets (see col. 1, lines 50-57).

Bland teaches the present invention provides a method of raising livestock comprising: The aqueous formaldehyde solution can contain additional ingredients conventionally used to preserve animal feed such as 5-15 wt. % C1-C-carboxylic acids or salts thereof including formic acid, acetic acid, propionic acid, butanoic acid, benzoic acid, sorbic acid and lactic acid. Suitable salts include alkali, alkaline earth, calcium, sodium and ammonium (see paragraph 0039). By formic acid, a carboxylic acid, being present with the base ammonium chemically a base neutralizes the acid in the solution, therefore meeting the limitation of claim 4. An animal feed which is resistant to challenge by pathogenic bacteria comprising: 100-1000 grams of hydrolyzable formaldehyde adduct per ton of feed distributed with a coefficient of variation of 7% or less; and **1-20 wt. % water** (see claim 1), therefore meeting the limitation of claim 5. The animal feed of claim 1 comprising: a member selected from the group consisting of corn, grain sorghum, wheat, barley, oats, soybean meal, cottonseed meal, feather meal, animal by-products and vegetable protein meal; and in addition comprising an added C.sub.1-C.sub.8-carboxylic acid or salt thereof, an added C1-C.8-alcohol or an added terpene, or mixtures thereof, in addition to any carboxylic

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acid, alcohol or terpene present in said member (see claim 2). The feed of claim 2 wherein said added carboxylic acid is selected from the group consisting of formic acid, acetic acid, propionic acid, benzoic acid, sorbic acid, lactic acid and butanoic acid; and wherein said alcohol is selected from the group consisting of methanol, ethanol, propanol, butanol, pentanol, hexanol, heptanol, octanol and phenol (see claim 3).

It would have been obvious to have combined the teachings of the above references to produce a liquid composition to add to feed to promote animal growth. Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed invention was made, to combine the teachings of the above references to produce a liquid composition comprising of sorbic acid, formic acid, and propionic acid.

A person of ordinary skill in the art would have been motivated to combine the teachings of the above mentioned references by producing a composition for promoting animal growth because it is prima facie obvious to combine two compositions each of which is taught in the prior art to be useful for same purpose in order to form third composition that is to be used for very the same purpose; idea of combining them flows logically from their having been individually taught in the prior art; thus, the claimed invention which is a combination of a formic acid, sorbic acid, and propionic acid set forth prima facie obvious subject matter. See In re-Kerkhoven, 205 USPQ 1069.

Finally, one would have a reasonable expectation of success given that the above mentioned references have provided a detailed blueprint for producing a



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composition for promoting animal growth, and the steps of which are routine to one of ordinary skill in the art.

Thus in the absence of evidence to the contrary, the invention of claims 1-6 and 13-16 would have been prima facie obvious as a whole to one of ordinary skill in the art at the time the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schasteen et al. (US Pub. No. 20040175434 A1), in view of Raczek (US patent No. 6787166 B2), and further in view of Bland (US Pub. No. 20020009527 A1) as applied to claims 1, 3-6 and 13-16 above and further in view of Campbell (US patent No. 5229118 A)

Schasteen et al., Raczek, Bland is discussed above.

Schasteen et al., Raczek, Bland do not teach potassium sorbate.

Campbell teaches Feed and water additive and method of making same. Such compositions comprise potassium sorbate. Potassium sorbate is useful as an antifungal substance and serves to inhibit fungi and yeast. Alternatively, other antifungal substances, for example, sodium propionate, sodium formate, propionic acid or formic acid, may be used.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate potassium sorbate of Campbell into the feed compositions of the prior art. The motivation to incorporate potassium sorbate is because Campbell teaches potassium sorbate is useful as an antifungal substance and serves to inhibit

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fungi and yeast. Therefore, a skilled artisan would have reasonable expectation of successfully producing a feed with antifungal and yeast inhibitory properties.

### ***Conclusion***

No claims of the present application are allowed.

Any inquiry concerning this communication should be directed to Zohreh Vakili, telephone number 571-272-3099. The examiner can normally be reached from 8:30 a.m. to 5:00 p.m., Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at 571-272-0718. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic business Center (EBC) at 866-217-9197 (toll-free).

Zohreh Vakili  
Patent Examiner  
Art Unit 1614

December 16, 2008

/Patricia A. Duffy/

Primary Examiner, Art Unit 1645

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